

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2007; month=12; day=13; hr=9; min=43; sec=6; ms=958;]

=====

Application No: 10077624 Version No: 3.0

Input Set:

Output Set:

Started: 2007-11-26 09:38:22.663
Finished: 2007-11-26 09:38:26.354
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 691 ms
Total Warnings: 28
Total Errors: 0
No. of SeqIDs Defined: 31
Actual SeqID Count: 31

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)

Input Set:

Output Set:

Started: 2007-11-26 09:38:22.663
Finished: 2007-11-26 09:38:26.354
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 691 ms
Total Warnings: 28
Total Errors: 0
No. of SeqIDs Defined: 31
Actual SeqID Count: 31

Error code	Error Description
------------	-------------------

	This error has occurred more than 20 times, will not be displayed
--	---

SEQUENCE LISTING

<110> Shi, Wenyuan
Morrison, Sherie
Trinh, Kham
Wims, Letitia
Chen, Li
Anderson, Maxwell
Qi, Fengxia

<120> Anti-Microbial Targeting Chimeric Pharmaceutical

<130> 59157.8007.US01

<140> 10077624

<141> 2002-02-14

<150> US 09/910,358

<151> 2001-07-19

<150> US 09/378,577

<151> 1999-08-20

<160> 31

<170> PatentIn version 3.4

<210> 1

<211> 563

<212> DNA

<213> Artificial sequence

<220>

<223> Histatin 5/linker peptide/SWLA3 VH chain construct synthesized
using sequential PCR techniques

<220>

<221> misc_feature

<222> (69)..(140)

<223> Histatin 5 peptide

<220>

<221> misc_feature

<222> (141)..(188)

<223> Glycine/serine linker peptide

<400> 1

ggatatccac catggacttc gggttgagct tggtttctt tgtccttact ttaaaaggta 60

tccagtgtga tagccacgct aagcggcacc acggatataa gcggaagttc cacgagaagc 120

accactcgca cagaggatac tctggtgccg gtggctcggg cggaggtggg tcgggtggcg 180

gcggatccga cgtgaagctt gtggagtctg ggggaggctt agtgaaccct ggagggtccc 240

tgaaactctc ctgtgcagcc tctggattca ctttcagtag ctataccatg tcttgggttc 300
gccagactcc ggagaagagg ctggagtgg tcgcacatccat tagtagtggt ggtacttaca 360
cctactatcc agacagtgtg aaggcccgat tcaccatctc cagagacaat gccaaagaaca 420
ccctgtacct gcaaatgacc agtctgaagt ctgaggacac agccatgtat tactgttcaa 480
gagatgacgg ctctacggc tcctattact atgctatgga ctactgggtt caaggaacct 540
cagtcaccgt ctctttagct agc 563

<210> 2
<211> 24
<212> PRT
<213> Homo sapiens

<400> 2

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr
20

<210> 3
<211> 16
<212> PRT
<213> Artificial sequence

<220>
<223> Linker peptide used to separate antimicrobial peptides from antibody VH chains in chimeric antibody fusion protein constructs

<400> 3

Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

<210> 4
<211> 165
<212> PRT
<213> Artificial sequence

<220>
<223> Histatin 5/linker peptide/SWLA3 VH chain construct synthesized using sequential PCR techniques

<220>
<221> MISC_FEATURE
<222> (1)..(24)
<223> Histatin 5 peptide

<220>
<221> MISC_FEATURE
<222> (25)..(40)
<223> Glycine/serine linker peptide

<400> 4

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr Ser Gly Gly Gly Ser Gly Gly
20 25 30

Gly Gly Ser Gly Gly Ser Asp Val Lys Leu Val Glu Ser Gly
35 40 45

Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala
50 55 60

Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gln Thr
65 70 75 80

Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr
85 90 95

Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
100 105 110

Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser
115 120 125

Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly
130 135 140

Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr
145 150 155 160

Val Ser Ser Ala Ser
165

<210> 5
<211> 533
<212> DNA
<213> Artificial sequence

<220>
<223> Dhvar 1/linker peptide/SWLA3 VH chain construct synthesized using sequential PCR techniques

<220>
<221> misc_feature
<222> (69)..(110)
<223> Dhvar 1 peptide

<220>
<221> misc_feature
<222> (111)..(158)
<223> Glycine/serine linker peptide

<400> 5
ggatatccac catggacttc gggttgagct tggtttctt tgtccttact ttaaaaggta 60
tccagtgtaa gcggctgttt aaggagctca agttcagcct gcgcaagtac tctggtgccg 120
gtggctcgaa cggaggtggg tcgggtggcg gcggatccga cgtgaagctt gtggagtctg 180
ggggaggctt agtgaaccct ggagggtccc tgaaactctc ctgtgcagcc tctggattca 240
ctttcagtag ctataccatg tcttgggttc gccagactcc ggagaagagg ctggagtg 300
tcgcatccat tagtagtggt ggtacttaca cctactatcc agacagtgtg aagggccgat 360
tcaccatctc cagagacaat gccaagaaca ccctgtacct gcaaattgacc agtctgaagt 420
ctgaggacac agccatgtat tactgttcaa gagatgacgg ctcttacggc tcctattact 480
atgctatgga ctactgggt caaggaacct cagtcaccgt ctctttagct agc 533

<210> 6
<211> 14
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic antimicrobial peptide based on histatin 5

<400> 6

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
1 5 10

<210> 7
<211> 155
<212> PRT
<213> Artificial sequence

<220>
<223> Dhvar 1/linker peptide/SWLA3 VH chain construct synthesized using sequential PCR techniques

<220>
<221> MISC_FEATURE
<222> (1)..(14)
<223> Dhvar 1 peptide

<220>
<221> MISC_FEATURE
<222> (15)..(30)
<223> Glycine/serine linker peptide

<400> 7

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser Asp Val
20 25 30

Lys Leu Val Glu Ser Gly Gly Leu Val Asn Pro Gly Gly Ser Leu
35 40 45

Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met
50 55 60

Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser
65 70 75 80

Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly
85 90 95

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
100 105 110

Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg
115 120 125

Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly
130 135 140

Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
145 150 155

<210> 8
<211> 89
<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody fusion protein construct

<400> 8

caccactcgac acagaggata ctctgggtggc ggtggctcg gcgagggtgg gtcgggtggc 60

ggcgatccg acgtgaagct tgtggagtc 89

<210> 9

<211> 84

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody fusion protein construct

<400> 9

ggtgtccagt gtgatagcca cgctaagcg caccacggat ataagcgaa gttccacgag 60

aagcaccact cgcacagagg atac 84

<210> 10

<211> 74

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer used to generate histatin 5/SWLA3 chimeric antibody fusion protein construct

<400> 10

gatatccacc atggacttcg gggtgagctt ggtttcctt gtccttactt taaaagggtgt 60

ccagtgtat agcc 74

<210> 11

<211> 87

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 11

gttcagcctg cgcaagtact ctgggtggcg tggctcgccc ggaggtgggt cgggtggcg 60

cggatccgac gtgaagcttg tggagtc 87

<210> 12
<211> 69
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 12
gtccttactt taaaagggtgt ccagtgtaaag cggctgttta aggagctcaa gttcagcctg 60
cgcaagtagc 69

<210> 13
<211> 65
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer used to generate dhvar 1/SWLA3 chimeric antibody fusion protein construct

<400> 13
ggatatccac catggacttc gggttgagct tggtttcct tgtccttact taaaagggtg 60
tccag 65

<210> 14
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> PCR primer used to generate histatin 5/SWLA3 and dhvar 1/SWLA3 chimeric antibody fusion protein constructs

<400> 14
tgggtcgacw gatggggstg ttgtgctagc tgaggagac 39

<210> 15
<211> 18
<212> PRT
<213> Sus scrofa

<400> 15

Arg Gly Gly Arg Leu Cys Tyr Cys Arg Arg Arg Phe Cys Val Cys Val
1 5 10 15

Gly Arg

<210> 16
<211> 57
<212> DNA
<213> Sus scrofa

<400> 16
aggggaggtc gcctgtgcta ttgttaggcgt aggttctgcg tctgtgtcg acgagga 57

<210> 17
<211> 18
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic antimicrobial peptide based on Ovis aries SMAP-29

<400> 17

Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1 5 10 15

Tyr Gly

<210> 18
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of protegrin PG-1

<220>
<221> misc_feature
<222> (8)..(15)
<223> SapI restriction enzyme cleavage site

<400> 18
ggtgtttgct cttccaacag gggaggtcgctgtgc 36

<210> 19
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of protegrin PG-1

<220>
<221> misc_feature

<222> (3)..(8)
<223> BamHI restriction enzyme cleavage site

<400> 19
ccggatcctc gtccgacaca gac 23

<210> 20
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of glycine/serine linker

<400> 20
ggggatccgg tggcggtggc tcg 23

<210> 21
<211> 26
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of glycine/serine linker

<220>
<221> misc_feature
<222> (4)..(9)
<223> ClaI restriction enzyme cleavage site

<400> 21
aacatcgata gatccgcgc caccgg 26

<210> 22
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of SWLA3 VL chain

<220>
<221> misc_feature
<222> (3)..(8)
<223> ClaI restriction enzyme cleavage site

<400> 22
ggatcgatgt tgtgatgacc cag 23

<210> 23
<211> 31

<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of SWLA3 VL chain

<220>
<221> misc_feature
<222> (5)..(10)
<223> SalI restriction enzyme cleavage site

<400> 23
gcgggtcgac cgacttacgt ttcagctcca g

31

<210> 24
<211> 29
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of SWLA3 VH chain

<220>
<221> misc_feature
<222> (5)..(10)
<223> SalI restriction enzyme cleavage site

<400> 24
gcgggtcgac gtgaagctgg tggagtctg

29

<210> 25
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of SWLA3 VH chain

<220>
<221> misc_feature
<222> (10)..(15)
<223> NheI restriction enzyme cleavage site

<400> 25
gggtgttagt ctagctgaag agacggtgac

30

<210> 26
<211> 24
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic linker for use in protegrin fusion protein

<400> 26

Leu Asp Pro Lys Ser Cys Glu Arg Ser His Ser Cys Pro Pro Cys Gly
1 5 10 15

Gly Gly Ser Gly Gly Thr Ser
20

<210> 27
<211> 72
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic linker for use in protegrin fusion protein

<400> 27
ctcgacccaa agagctgcga gcggagccac agctgcccac cgtgcggggg tgggtccggc 60
ggtgccacta gt 72

<210> 28
<211> 28
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of SWLA3 VH chain/CH3 linker

<220>
<221> misc_feature
<222> (5)..(10)
<223> NheI restriction enzyme cleavage site

<400> 28
gtgggcttagc ctcgacccaa agagctgc 28

<210> 29
<211> 38
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of SWLA3 VH chain/CH3 linker

<400> 29
aggttctcg ggctgcccac tagtgccacc gccggacc 38

<210> 30
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer for amplification of human CH3 gene fragment

<400> 30
gggcagcccc gagaacaac

19

<210> 31
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> Reverse primer for amplification of human CH3 gene fragment

<220>
<221> misc_feature
<222> (7)..(12)
<223> PstI restriction enzyme cleavage site

<400> 31
ggtggctctgc agtttacccg gggacaggga gag

33